Pantera AC Article

When I first bought my Pantera the AC didn't work. The system was completely stock and still had the original York compressor. Since the hoses looked like they were in good shape, (and one of the local Pantera vendors told me I should stick with R12), I decided to just replace the pump with a new style rotary compressor and install a new receiver-dryer.

The new compressor had o-ring type hose connectors so the vendor supplied adapters so I could connect my original compression type hoses to the new compressor. These adapters were the start of my first major problem.

When I connected my original hoses to the new compressor I didn't notice that one of the adapters had turned sideways. As I tighten the hose it did get tight but not as tight as I would have liked. It felt kind of funny like maybe it was going to strip so I stopped. At this point I should have taken it back off and checked it out but because it was fairly tight I let it go.

I found a local AC shop that sounded like they new what they were doing so I headed there to have the AC charged. The guy at the front counter said they could do it and took the car around back where the shop doors were. You could not see the shop from the waiting room. I didn't feel comfortable that they knew what they were doing on the Pantera so I walked around back by their doors. When I got there 2 of their technicians were looking over the car with a confused look on their faces. I pointed out where the compressor was as they couldn't seem to find it. As I watched from the door, (outside of the shop) I was told by another employee that I could not watch and that I had to go back to the waiting room. My theory is if they are afraid I might see them do something wrong to my car then I can't trust them with my Pantera. After some words with the management I had the work stopped, (before it was really started) and went on to find another AC shop I could trust.

On my way home I found another AC shop that didn't mind me watching so I decided to have them evacuate and recharge the system with R12. It charged up fine. They put some dye in as well to help detect any leaks that might be present. It was blowing real cold. Right before I was about to leave I did notice a couple of drips from the hose fitting that I was having trouble with before. The technician said I could simply tighten it up when I get home. I should have done it there incase of a problem but I didn't.

After paying the $250 bill for labor and 3 pounds of R12 I was on my way home with the AC working great! 34 degree air the whole way home. Once home I jacked up the car to tighten the fitting (still not knowing the adapter had turned sideways).

A couple of turns with the wrench and a slight snap noise and my expensive R12 was leaking out badly. I called the AC shop back up and they said to get back down there as quickly as possible so they could recover as much of the R12 as possible. I raced back down there only to find out it had all leaked out!

Once we removed the hose from the compressor we found the adapter had turned sideways. The snap I felt was when it cracked/crushed when I tried to tighten the hose. Darn, I should have checked it when I knew it didn't feel right. Oh well, live and learn.

I asked the AC technician to put the correct type of ends on my hoses and recharge the AC. Another $250 later I was on my way home with my AC working great again!

The car sat for about 4 months after that since I had other projects I was doing to the car. When I got it on the road again I noticed the AC wasn't blowing cold any longer. I obviously had a leak. I could see it was not empty, but just low as I could see a stream of bubbles in the sight glass. I had a can of R12 from years ago and decided to top off the system after tightening up all the connections. This is when I found that one of the hose ends was leaking where the new crimped end was installed. Apparently they didn't get the hose pushed on all the way before they crimped it.

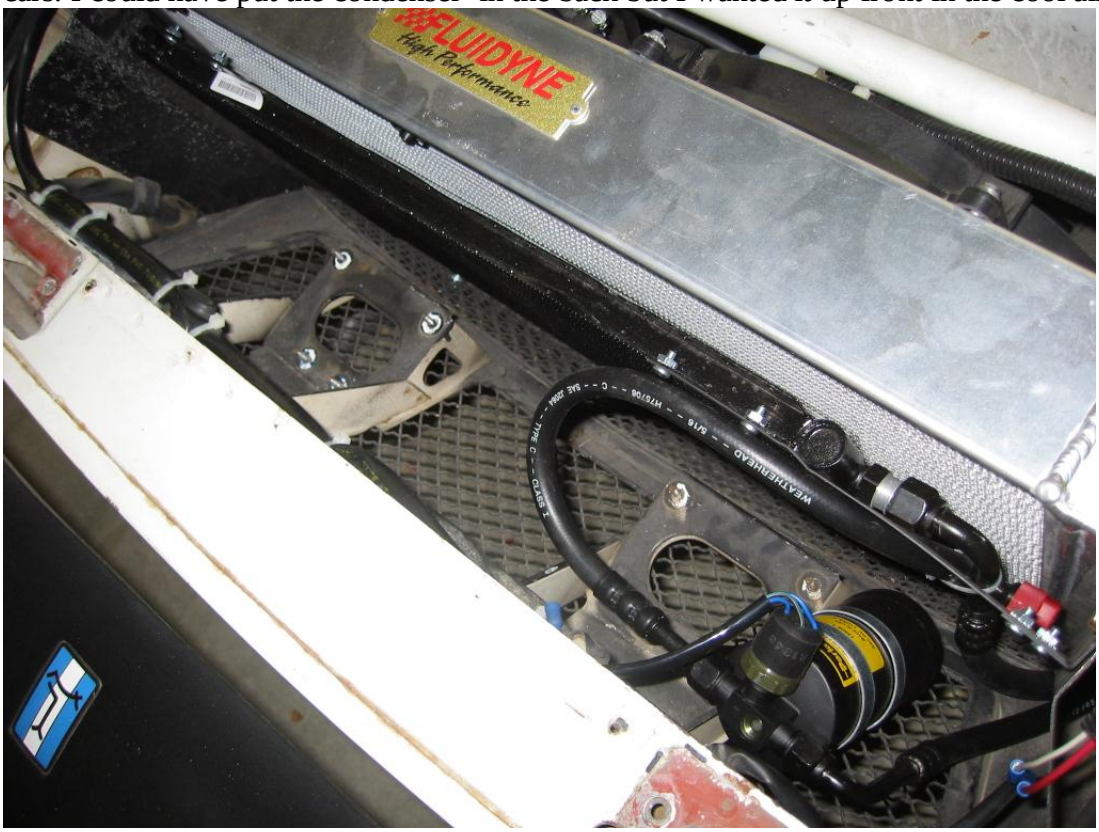
After fixing the hose end I now have to charge the system again. This is getting ridiculous and very expensive. I decided to try Freeze12 since it is touted to be almost as good as R12 but affordable. I have also heard that it has worked well for some. Did you know that Freeze12 is 80% R134a?

After charging the system with Freeze12 it did work but not nearly as good as the R12. It would get the vent temperature down to about 50 degrees on a 95 degree day but that was about it. I was actually ok with that since it was a lot better then no AC and I had already wasted so much money on R12.

I drove around with the AC on, on a VERY hot day. It was working ok when all of a sudden one of the hoses let loose.

I really considered just leaving it broken since I had wasted so much time and money and was still no better off then day one. My problem is I just can't leave something broken on my Pantera. If it is there it must work. This is when I decided a completely new R134a system is what I needed. No more messing around. EVERYTHING new! And with R134a I can service it myself.

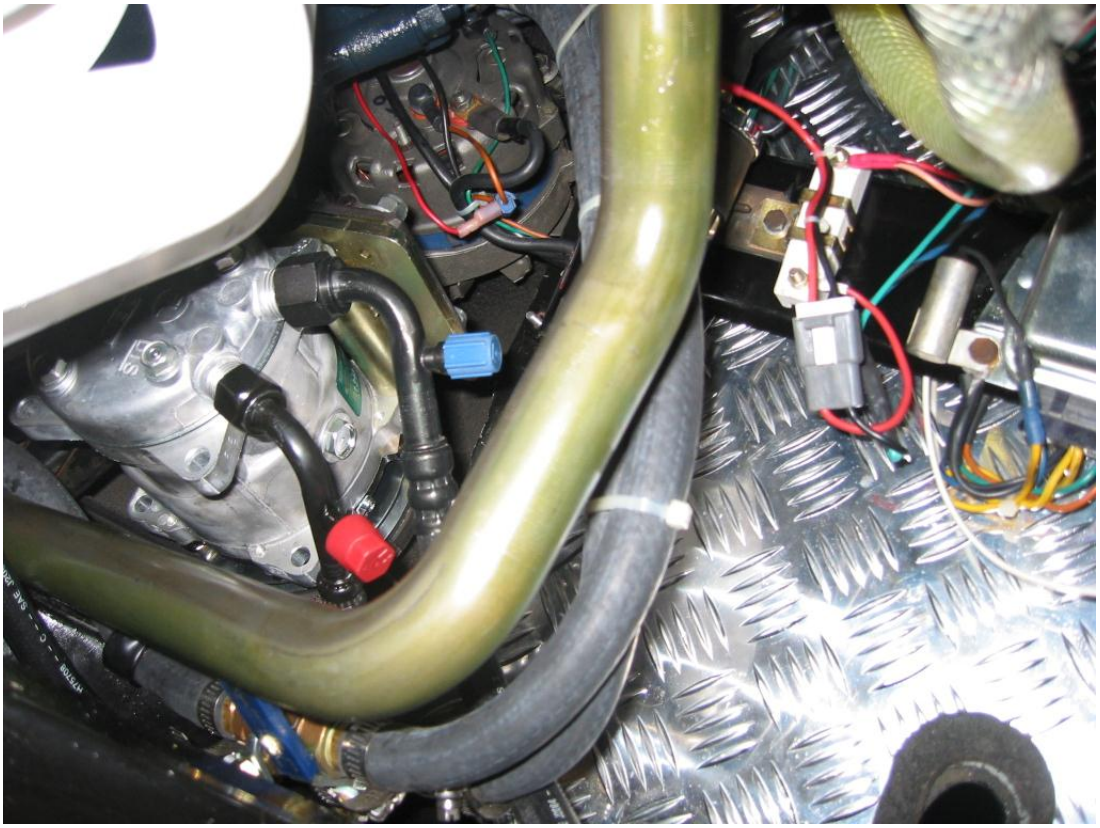
After doing a lot of research on my options I decided to go with a condenser in front of the radiator. I am told a properly designed R134a system will work as good as the 30 year old R12 system the Pantera came with. The key is the condenser. With the new Parallel Cross Flow condensers of today R134a will work quite well in our cars. I could have put the condenser in the back but I wanted it up front in the cool air.



Here is a picture of the new Condenser and the new receiver/dryer. Notice how thin the new condenser is.

I bought most of my parts from Vintage Air. Their prices are very reasonable and have everything you will need except for the evaporator if you plan on changing that as well.

Here is a picture of the new #8 hard line I ran under the car for the Compressor to the Condenser hose. You can also see the #6 hose above the #8 hose. The #6 hose runs from the receiver/dryer to the expansion valve.



Here is a picture of the new Compressor with the service fittings part of the new hoses. The #10 hose follows its original path to the Evaporator. The #8 hose goes under the car to the Condenser. The newer style hoses are all barrier type hoses and are much smaller then the older bulkier hoses of 30 years ago.

Since I am going to change everything the old evaporator had to go as well. I sent my old AC/Heater box to Pantera's by Wilkinson. Steve built me a new heater/evaporator core where he removed one row from the heater core and made me a new evaporator that was one row bigger.

One of the nice things about the new evaporator is it is also a parallel flow unit, much like the condenser. It is basically 4 2 row evaporators stacked together. So with the bigger and more efficient Condenser up front and the bigger evaporator under the dash this system should be blowing out ice cubes (with R134a)!

Parts List:

Vintage Air Parts:

Compressor, Sanden 508 134a	04808-VUA	$199.00
5' #8 Hard Line	12561-VCD	$ 19.50
14 x 22 Super Flow Condenser	03262-VUC	$149.00
Receiver-Dryer w/pressure cutout switch	07323-VUC	$ 59.00

Pantera's by Wilkinson

Evaporator	$550.00
Expansion Valve	$ 85.00

All new hoses made by local hose shop $200.00

I am happy to report that the new system works great! I have 36 degree air blowing out on a 95 degree day. I should have just done the right thing from the beginning.

The funny thing is the same vender that said I should stick with R12 is now telling customers that they should go with R134a. I totally agree at this point. I can now service the system myself and at a reasonable cost.

I have heard of people getting the 509 certification so they can buy R12 and service the system themselves. This is ok but R12 is still going to be expensive. For me, after everything I have been through, R134a is the only answer. It's the old pay me now or pay me later kind of thing…

-Scott Bell